

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of

Amendment of Part 2 of the Commission's  
Rules to Allocate the 455-456 MHz and  
459-460 MHz Bands to the Mobile-Satellite  
Services

ET Docket No. 97-214

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FEDERAL COMMUNICATIONS COMMISSION  
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COMMENTS OF CHANCELLOR MEDIA CORPORATION

Chancellor Media Corporation ("*Chancellor*") respectfully submits these Comments in response the Commission's above-captioned Notice of Proposed Rulemaking ("*NPRM*") related to the allocation of the 455-456 MHz and 459-460 MHz frequency bands to the Mobile-Satellite Service.

**I. THE USE OF THE 455-456 MHZ SPECTRUM BAND IS VITAL TO RADIO BROADCASTERS THROUGHOUT THE UNITED STATES**

Chancellor operates approximately 100 commercial radio stations in more than twenty markets across the U.S. Thus, Chancellor is well situated to attest to the indispensability of the Broadcast Auxiliary use of the 455-456 MHz spectrum. First, and most important, stations use the spectrum to deliver high quality program feeds to their studio sites for inclusion in their broadcasts. Without it, they would be forced to use substantially more expensive means of transmission. Thus, in many small markets, where coverage of local events is important to providing local service, access to the broadcast auxiliary band can be the difference between

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financial success and failure. Moreover, in both small and large markets the broadcast auxiliary band provides the *only* means of delivering the immediacy of live reporting on events where time does not permit use of alternate delivery mechanisms. Even where time might permit alternate means, often technology and/or financial reality exclude those means. Satellite services can be too expensive, broadcast quality analog telephone lines take weeks to install and are expensive to operate, and ISDN service (though, it too takes weeks to install) is simply unavailable in many locations, especially in smaller markets.

Radio stations rely on Broadcast Auxiliary Service, not only for live news gathering and reporting, but also for the transmission of commercial broadcasts, the maintenance of positive transmitter control and emergency use as studio-to-transmitter-link. Reduction of capacity will interfere with these areas, too, forcing stations either to do without or switch to more expensive alternatives.

Over the past nearly twenty years with the addition of hundreds of new FM stations and resulting increased competition, this spectrum band has been fractured into smaller and smaller channels to accommodate increased use. Even with this “splintering,” this band has become so congested that finding usable channels for every Broadcast Auxiliary user has become all but impossible. Reducing the quantity and quality of these channels even further by co-allocating them to the Mobile-Satellite Services on a co-primary basis will only make a difficult situation more so. The Broadcast Auxiliary Service is in need of more spectrum, not less.

With the projected forty million users mentioned in the NPRM, no amount of protection could prevent the subsequent increase in the noise floor of this spectrum. This fact alone will result in the reduction of usable spectrum for Broadcast Auxiliary and other incumbent

users. Because the auxiliary service spectrum is already so limited, any reduction in quantity or quality of this service would be detrimental to current users.

## **II. THE NPRM INACCURATELY PORTRAYS BROADCAST AUXILIARY SERVICE USAGE AS INTERMITTENT**

The NPRM repeatedly refers to Broadcast Auxiliary use of the 455-456 MHz spectrum as “intermittent.” This depiction is not accurate. While it is true that some uses of this spectrum are short in duration, it is also used in many instances to retrieve long form programming. Many of these events can continue for days, weeks or even months. In fact, many broadcasters use this spectrum to maintain positive transmitter control through Transmitter to Studio Links (“TSL”). In the case of a TSL, the use is not “intermittent” at all, in fact it is *required* to be in *constant* use. Likewise, when used as an emergency studio-to-transmitter link, the frequencies are again in *constant* use to maintain a programming link to the station’s transmitter site. Therefore, labeling the current usage of this spectrum as “intermittent” is both misleading and inaccurate.

This spectrum is normally used to relay signals for “Live On-Air” broadcasts, and as such, the quality must be both impeccable and without interruption. There is no chance to resend a data packet or wait for the frequency to open up, as may be the case with other technologies. There are no error correcting algorithms to circumvent interference. Broadcast Auxiliary users simply do not have the luxury of hopping to any open channel to avoid a conflict. Any interference with the Broadcast Auxiliary user’s signal is immediately broadcast over the station’s main carrier. Thus, any amount of interference or delay in channel availability is unacceptable.

### **III. THE NPRM VIOLATES INTERNATIONAL FOOTNOTES S5.286B AND C.**

The NPRM states that “MSS operation in these bands shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services and shall not constrain the development and use of the fixed and mobile services.” There is simply no way that these two services can coexist without mutual interference. While the MSS users propose channel monitoring and frequency hopping as a means to eliminate this interference, at best, these measures will only serve to reduce the interference. Substantial and unresolved interference problems will still remain despite these measures.

One major use of the 455-456 MHz spectrum band is as the input frequency for two-way repeaters. These repeaters are normally accessed by low power “handy-talkies.” There are many situations in which these units are used inside of buildings or in places that may be otherwise obstructed from the “view” of the orbiting LEO satellite. In these cases, the LEO would incorrectly allow allocation on this channel and interference would result. MSS operations on these frequencies would tie-up the repeaters input and subsequently disable their use. While these repeater pairs could be reversed, the cost would be prohibitive and would result in additional cases of interference between Broadcast Auxiliary users.

Additionally, it is common practice to use these frequencies for relaying live audio from inside of a building to a mobile repeater vehicle placed in the parking lot. In this case, the transmitter would not be “seen” by the LEO due to the shielding of the building and would again allocate that frequency for use. In this instance however, the resulting interference would be relayed directly on the air of the affected AM, FM, TV or cable station.

The NPRM states that “MSS Uplink channels can be reassigned (on the order of every 10 seconds).” Are incumbent users, thus, compelled to resign ourselves to this interference

for up to the first ten seconds of each use? This delay is far too long to be considered protective of incumbent users and cannot be considered to comply with international footnotes S5.286B and C. In fact, bearing in mind the immediacy of live broadcasting, any delay in availability could be quite damaging.

Furthermore, the NPRM incorrectly assumes that there will be no interference to incumbent users and therefore does not explain any structure for resolving the certain interference problems that will develop in this spectrum band should the Commission implement its proposal. What governing entity would have jurisdiction over this interference? How would complaints of interference from co-primary users be resolved?

#### **IV. THE NPRM WOULD HAVE A NEGATIVE FINANCIAL IMPACT ON SMALL ENTITIES**

The NPRM asks for comment on the negative financial impact on small entities. Since this NPRM was written under the mistaken presumption that there would be no interference on incumbent users, it therefore assumes that there will not be a negative financial impact. In the NPRM, “small entities” are defined as those with less than \$11.0 million in annual gross receipts. With that as the benchmark, many, if not a majority, of the 10,000+ radio stations qualify as “small entities.” Of special interest should be the loss to the smallest broadcasters. For the “Mom and Pop” broadcaster, increased interference could be extremely detrimental to their financial situation. Many of these stations are already on the verge of extinction. Their competitors for advertising dollars more often include a newspaper, billboards and direct mail, than another radio stations. One advantage that these stations have is the ability to provide instant access and immediate results for advertisers through use of live remote

broadcasts. Without this tool, these broadcasters will find it even more difficult to secure sufficient advertising revenues.

Small broadcasters also make a great deal of their income (and provide a large measure of community service) through the broadcast of local high school sporting events. Every weekend is filled with football, basketball and/or baseball. In most cases, the radio station is also the only means of mass distribution for the high school as well. Having such an opportunity boosts ticket sales and public recognition for the school. Thus, impeding the ability of the radio station to broadcast these games not only hurts the broadcaster, but the school and the community as well.

#### **V. THE NPRM PROVIDES INSUFFICIENT INFORMATION REGARDING THE INTERFERENCE PROTECTION SCHEME**

Another area that was not sufficiently addressed in the NPRM is how MSS users would contend with the widely varying channel allocations of the Broadcast Auxiliary Service in the 455-456 MHz band. Broadcast Auxiliary users are allocated bandwidths of 10, 25 or 50 KHz at various frequencies depending upon the number of other Broadcast Auxiliary users in a particular market. Will MSS users, by default, assume that all channels are of the widest bandwidth? How will MSS users contend with unmodulated carriers? What bandwidth would be protected around an unmodulated carrier? If the surrounding bandwidth of an unmodulated carrier is not sufficiently guarded, MSS could allocate use of a channel that is well within the bandwidth of the receiver, thereby causing interference to the Broadcast Auxiliary user. None of these important questions have been appropriately addressed by the NPRM.

## VI. CONCLUSION

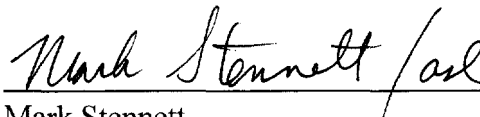
The Commission's proposals in the NPRM cannot proceed without causing "harmful interference to...stations of the fixed or mobile service". Thus, Chancellor Media urges the Commission to refrain from allocating the 455-456 MHz band to MSS on a co-primary basis.

Respectfully submitted,

CHANCELLOR MEDIA CORPORATION

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